

What is claimed is:

1. A 3-dimensional imaging screen for multi-viewer which projects an object on the screen such that viewers watch a 3-dimensional image, the screen
5 comprising:
a 3-dimensional image projection screen positioned to a direction of an incident beam of the image, and
a prism panel formed with prism cell having a plurality of disperse surfaces of the incident beam on a rear surface of the 3-dimensional image projection screen,
10 whereby the number of viewing zones is corresponding to the number of the disperse surfaces of the prism cell.
2. A 3-dimensional imaging screen for multi-viewer as claimed in claim 1, wherein the prism panel is coupled to the rear surface of the 3-dimensional image
15 projection screen, and the 3-dimensional image projection screen has enough thickness not to generate an interference effect such as a moir_ interference pattern.
3. A 3-dimensional imaging screen for multi-viewer as claimed in claim 1, wherein the prism panel is installed to the rear surface of the 3-dimensional image
20 projection screen having a predetermined distance therebetween, and the distance between the 3-dimensional image projection screen and the prism panel is properly spaced apart not to generate the interference effect such as a moir_ interference pattern.
4. A 3-dimensional imaging screen for multi-viewer as claimed in claim

1, wherein the prism panel is formed and integrated to the rear surface of the 3-dimensional image projection screen in a emboss or engrave manner, and the 3-dimensional image projection screen has enough thickness not to generate the interference effect such as moir_ interference pattern.

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5. A 3-dimensional imaging screen for multi-viewer as claimed in claim 1, wherein the prism panel is configured by that the prism cell of which a size is corresponding to a size of one pixel of the projected image on the 3-dimensional image projection screen is formed in an emboss or engrave manner in an 1-dimensional arrangement.

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6. A 3-dimensional imaging screen for multi-viewer as claimed in claim 5, wherein a height of the prism cell is equal to or higher than a height of the 3-dimensional image projection screen, and a width of the prism cell is equal to or narrower than a width of one pixel of the projected image on the 3-dimensional image projection screen.

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7. A 3-dimensional imaging screen for multi-viewer as claimed in claim 5, wherein the width of the prism cell is wider than the width of the pixel of the projected image on the 3-dimensional image projection screen.

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8. A 3-dimensional imaging screen for multi-viewer as claimed in claim 5, wherein the prism cell is configured into one of a triangular prism, a dove prism, a tetragonal prism, a pentagonal prism, a hexagonal prism, etc., according to the number

of required viewing zones.

9. A 3-dimentional imaging screen for multi-viewer as claimed in claim 1, wherein the prism panel is configured by that the prism cell of which a size is
5 corresponding to a size of one pixel of the projected image on the 3-dimentional image projection screen is formed in an emboss or engrave manner in a 2-dimentional arrangement.

10. A 3-dimentional imaging screen for multi-viewer as claimed in claim
10 9, wherein a sectional area of the prism cell is equal to or smaller than area of the pixel of the projected image on the 3-dimentional image projection screen.

11. A 3-dimentional imaging screen for multi-viewer as claimed in claim
15 9, wherein a sectional area of the prism cell is greater than area of the pixel of the projected image on the 3-dimentional image projection screen.

12. A 3-dimentional imaging screen for multi-viewer as claimed in claim
16 9, wherein the prism cell is configured into one of a triangular prism, a tetragonal prism, a pentagonal prism, a hexagonal prism, etc., according to the number of required
20 viewing zones.

13. A 3-dimentional imaging screen for multi-viewer as claimed in any
one of claims 1 to 12, wherein a thickness of the prism panel is constant or the thickness
of the prism panel is decreased or increased in a constant ratio to a width or height

direction.

14. A 3-dimensional imaging screen for multi-viewer as claimed in claim 13, wherein the prism cell has a reflective coating formed on a surface thereof.

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15. A 3-dimensional imaging screen for multi-viewer as claimed in claim 14, wherein an angle between the disperse surfaces in prism cell is near to 180 degrees.